### **CERES Systems Engineering Committee**

Members: Maria Mitchum, NASA, DMO

Sandy Nolan, SAIC Jill Travers, DAAC Sue Sorlie, DAAC

Charter: Serve as a forum for resolving issues which affect more than one

working group. Report to CERES Data Management Team

## November 24, 1998, 12:30pm

Maria called a special meeting of the Data Management Team Supervisors to discuss Documentation and Configuration Management (CM) Issues. Those in attendance were: Jim Kibler, Carol Tolson, John Robbins, Tammy Ayres, Nichele McKoy, Michelle Ferebee, Kay Costulis, Sandy, and Jill. Tammy and Nichele represented the CM department. Michelle represented the ISO 9000 effort, that will be in effect in 1999, and Kay advised the committee of Web issues.

Maria presented a slide of proposed Documentation/CM standards. This slide will be included at the end of this report. The Configuration Management of Documents was the main issue of the presentation. Maria pointed out that the present CM Plan Release 2 Version 1, dated Jan. 1998, includes most of the suggested procedures, but these have thus far been ignored and/or just not taken seriously.

Maria stressed that the CERES Data Management Team should organize all documents in a systematic manner. All documents should be signed by the appropriate CERES representative, checked into CERES CM, and, when needed for distribution or editing, be retrieved from CM. If a document is to be edited, there should be a Document Configuration Change Request (DCCR) form, similar to the System Configuration Change Request (SCCR) form, that is already in place via Web access. This form would serve as a request for the edification of a document and list the proposed changes that are to be made. The DCCR would have a unique Informix Database number and would be a reference number for the changes made to a document. The DCCR must be approved by the Configuration Control Board (CCB) and would serve as a paper-trail for all changes to all documents.

Another major factor to support this proposal, described by Michelle, is that NASA, LaRC, programs and processes will be examined, starting in Jan. through June 1999, to determine compliance to ISO 9000 Standards and Practices. CERES could be a candidate to be examined. It would be prudent to start organizing Documentation practices to agree with the ISO standards.

After much discussion all present agreed to the proposed recommendations. Several Action Items came out of the meeting.

- 1. Maria will work with Jim to compile a Master List of all Document Types that should be included in the CM system starting with the DAAC Required Documents and going on from there
- 2. The first document candidate for the CM system will be the Operator's Manuals.
- 3. Tammy will write out step by step instructions for checking a document out the CM system.
- 4. Nichele and Tammy will start the design work to implement a DCCR feature in the present CM configuration.
- 5. Kay will work with Tammy to store all Documents, presently on the Web, into the CM

system.

#### **Presentation Chart:**

## **CERES Documentation/CM Procedures**

The following steps should be followed to process a document through the CERES Documentation Department and into the CERES Configuration Management (CM) system.

- 1. The author(s) submit a FrameMaker (FM) document to CERES Documentation.
- 2. CERES Documentation complete any 'required changes' and return a view-only FM copy to the author(s) where the 'tar' filename reflects the stamp of the Documentation Department and the date, such as: fn.doc.v#.111098, here '.doc.v#.111098' was appended to the filename (fn).
- 3. Author(s) and Review Committee, if one exists, should review the revised document at the same time, consolidate comments and resubmit marks on a hard copy of all changes and corrections to Documentation. (It is suggested that the author monitor changes to a document by using the 'compare' feature of FM on the original and returned copy from Documentation.)

Note: Repeat steps 2 and 3, until all (author(s)/committee) are satisfied.

- 4. CERES Documentation will create and deliver the tarred and compressed editable version to CM.
- 5. CM will create and send the view-only copy to the author(s) for final approval.
- 6. If author(s) find a mistake or need to make another modification, the procedure stars over again. Once author(s) is satisfied, email approval shall be sent to CM.
- 7. Once CM receives written release approval from the author(s), CM will distribute the document to all interested parties. Ultimately, CM will be the repository for the final editable FrameMaker document.

# **CM Documentation Database Proposal**

- 1. Establish an Informix Documentation Table to store each CERES document item listing.
- 2. Establish a change request procedure similar to the SW SCCR format, but geared exclusively for documents via Web access.
- 3. All Documentation Versioning will be maintained by CVS.
- 4. All document final versions be stored (in CVS) and retrieved from CM.
- 5. Maintain cross-reference between Informix Doc. Table with CVS Versioning index for each document for traceability.
- 6. Allow documentation retrieval via Web.
- 7. Create Errata sheet for each document, via Web, for each Document (see Item 5)

The meeting was adjourned at 1:45pm and the SE committee members stayed to discuss the following:

Jill reported that the DAAC had met earlier that morning to discuss the renaming of External Ancillary Data files. This function was proposed to be achieved by creating an additional column to the Archive Catalog Database to store an alias (the new name) to each external ancillary data file. Each file will be physically stored in the archives under the original name, but when retrieved, will be retrieved by the alias. Therefore, retrieved files will have the new name on local disk. Chris Harris suggested perhaps we could standardize all External Ancillary Data filenames. Maria pointed out that this may be impossible because of the data characteristics of each External Ancillary Data Set. Maria indicated that she would discuss this possibility with the appropriate subsystem leads. If it is possible to standardize the filenaming of External Ancillary Data Sets then we may want to assign Data Set names to each External Ancillary Data Set.

Jill also reported that Simulated TRMM data reside in the DAAC Archives. This data was retrieved, by accident, a while back instead of the 'real' data (both had the same datadate). Jill asked if these data sets could be taken out of the Archive Catalog to keep this type of accident from occurring again. The committee pointed out that there must be a way of documenting that these data sets exist and the access location of the data, which may be required for data retrieval.

Meeting adjourned 2:15pm mvm

May 31, 2000 3:00 pm

# **Documentation Configuration Management Meeting**

Maria met with the SAIC Configuration Management (CM) Staff: John Robbins, Tammy Ayers, and Nichele McKoy to discuss the documentation naming convention proposed by Maria. (Carla Franklin was unable to attend.) The CM staff proposed another documentation naming convention to more closely resemble the software naming convention currently used in the CM system. They requested that they have the opportunity to formally write up their proposal. This will then be sent to Maria and Jim Kibler for comments.

It is very important that the documentation naming convention or schema be resolved before the CM staff can proceed to building the file storage and retrieval system for the documentation archives. Following this activity will be the construction of the application Documentation CM Web pages.

Meeting adjourned at 4:15 pm mvm

July 17, 2000 1:00 pm

**Document Configuration Management Meeting** 

Maria met with Jim Kibler and the SAIC Configuration Management Team members John Robbins, Tammy Ayers and Nichele McKoy to discuss the CERES Documentation Plan as originally written by Maria. It was decided that:

- The Documentation Plan will be renamed Document Plan and Procedures.
- The CM Plan will be renamed as CM Plan and Procedures. The plan portion of the document will describe the CM requirements; the procedures portion will describe the 'how to' or implementation procedures.
- John Robbins will give a fresh cut at writing both documents.
- An added feature will include the web location for the 'Documentation Guidelines' for the CERES software documents.

Meeting adjourned 3:15 pm mvm